1. A method for forming a spin-valve type abutted junction GMR sensor element with a thinner hard magnetic longitudinal bias layer having significantly improved magnetic properties in the junction region comprising:

providing a substrate;

forming over said substrate a seed layer for the spin-valve GMR sensor element;

forming over said seed layer a spin-valve GMR sensor element;

etching said spin-valve GMR sensor element to produce abutted junctions;

forming over said abutted junctions a lattice matching seed layer for the hard magnetic bias layer;

forming over said lattice matching seed layer a hard magnetic longitudinal bias layer;

forming over said hard magnetic longitudinal bias layer a conducting lead layer.

2. The method of claim 1 wherein the seed layer for the spin-valve GMR sensor element is a layer of material chosen from the group consisting of NiCr and NiFeCr, and is formed to a thickness of between 15 Angstroms and 200 Angstroms.

3. The method of claim 1 wherein the seed layer for the spin-valve GMR sensor element is a layer of Ta, and is formed to a thickness of between 15 Angstroms and 200 Angstroms.

4. The method of claim 2 wherein the lattice matching seed layer for the hard magnetic longitudinal bias layer comprises a layer of CrX, X being chosen from the group consisting of Ti, W, Mo, V, and Mn, formed on a Ta underlayer, the Ta being formed to a thickness of between 10 Angstroms and 200 Angstroms, and the CrX being formed to a thickness of between 15 Angstroms and 200 Angstroms.

5. The method of claim 3 wherein the lattice matching seed layer for the hard magnetic longitudinal bias layer is a layer of CrX, X being chosen from the group consisting of Ti, W, Mo, V, and Mn and the CrX being formed to a thickness of between15 Angstroms and 200 Angstroms

6. The method of claim 1 wherein the hard magnetic longitudinal bias layer is a layer of CoY, wherein Y is chosen from the group consisting of CrPt, Pt, and CrTa alloy, and is formed to a thickness of between 50 Angstroms and 1000 Angstroms.

7. The method of claim 1 wherein the conducting lead layer is a layer of Ta/Au/Ta and is formed to a thickness of between 100 Angstroms and 1650 Angstroms.

8. A spin-valve type abutted junction GMR sensor element with a thinner hard magnetic longitudinal bias layer having significantly improved magnetic properties in the junction region comprising:

a substrate;

a seed layer for the spin-valve GMR sensor element formed over said substrate;

a spin-valve GMR sensor element formed over said seed layer;

abutted junctions etched into said spin-valve GMR sensor element;

a lattice matching seed layer for a hard magnetic longitudinal bias layer formed over said abutted junctions;

a hard magnetic longitudinal bias layer formed over said lattice matching seed layer;

a conducting lead layer formed over said hard magnetic bias layer.

9. The method of claim 8 wherein the seed layer for the spin-valve GMR sensor element is a layer of material chosen from the group consisting of NiCr and NiFeCr, and is formed to a thickness of between 15 Angstroms and 200 Angstroms.

10. The method of claim 8 wherein the seed layer for the spin-valve GMR sensor element is a layer of Ta, and is formed to a thickness of between15 Angstroms and 200 Angstroms.

11. The method of claim 9 wherein the lattice matching seed layer for the hard magnetic longitudinal bias layer comprises a layer of CrX, X being chosen from the group consisting of Ti, W, Mo, V, and Mn, formed on a Ta underlayer, the Ta being formed to a thickness of between 10 Angstroms and 200 Angstroms, and the CrX being formed to a thickness of between 15 Angstroms and 200 Angstroms.

12. The method of claim 10 wherein the lattice matching seed layer for the hard magnetic longitudinal bias layer is a layer of CrX, X being chosen from the group consisting of Ti, W, Mo, V, and Mn and the CrX being formed to a thickness of between15 Angstroms and 200 Angstroms.

13. The method of claim 8 wherein the hard magnetic longitudinal bias layer is a layer of CoY, wherein Y is chosen from the group consisting of CrPt, Pt, and CrTa alloy, and is formed to a thickness of between 50 Angstroms and 1000 Angstroms.

14. The method of claim 8 wherein the conducting lead layer is a layer of Ta/Au/Ta and is formed to a thickness of between 100 Angstroms and 1650 Angstroms.